PAKISTAN ACADEMY

TARGET PAPER

XII – ZOOLOGY

FOR ONLY SUPPLEMENTARY PAPER (08 FEBRUARY)

کسی بھی کلاس کے Supply or Annual کے ٹارگٹ پیپر دیکھنے کے لئے اپنا واٹس ایپ نمبر ہمارے پاس SAVE کروائیے

Homeostasis

Short Question:

1- How does osmoregulation take place in trout fish? (Hint: Fresh water)
2- Write a note on lithotripsy
3- How does osmoregulation take place in marine bony fish?
4- Write a note on two different types of nephron related to adaptation in kidney 5- Why hypothalamus is called the thermostat of the body?
6- Define dialysis. Write any one method of its.
7- Describe osmoregulation in terrestrial animals
8- State he role of hormones in the working of kidneys
9- Why do freshwater fishes excrete dilute urine and marine fishes excrete concentrated urine? 10- Why moderate form of fever is good for health.
11- Explain the role of brain in regulating fever.
12- Write any four functions of liver.
13- Write a note on dialysis

Long Questions

1- Explain the regulatory functions of the human kidney and draw a labelled diagram of nephron 2- Explain the structure of nephron and write regulatory functions of kidney
3- How do homiotherm maintain their body temperature during hot and cold seasons? OR explain thermoregulation in mammals.
4- Discuss the homeostatic function of liver

Support and Movement

Short Questions

1- Write a note on smooth muscle OR cardiac muscles
2- Write four differences between bones and cartilage
3- How does hydrostatic skeleton help the earthworm in locomotion?
4- Differentiate between skeletal muscle and smooth muscles
5- Write four functions of skeleton 6- Write a note on exoskeleton
7- Describe locomotion in jellyfish
8- Describe locomotion amoeba
9- Why the cardiac muscles are striated and involuntary in nature.
10- What causes abnormal muscle contraction in sportsman?
11- Define Joints. Name different types of joints
12- Discuss the abnormal muscle contraction
13- Differentiate between types of muscles
14- Write a note on skeletal system deformities

Long Questions

1- Describe locomotion in jellyfish, starfish and earth worm.
2- Define muscles and describe in detail structure of skeletal muscles. 3- Describe the mechanism of contraction of skeletal muscles.

Coordination and control

Short Questions

1- Why is nervous coordination called the quickest way of communication within the body?
2- How does pancreas regulate the amount of blood sugar?
3- Which hormone is released from adrenal medulla and why is it called emergency hormone?
4- Write four difference between nervous and chemical coordination
5- Why do cnidarians have diffused nervous system?
6- Differentiate between diffused nervous system and centralized nervous system
7- Write a note on reflex action
7- Differentiate between parasympathetic and sympathetic nervous system
9- Write a note on thymus gland
10- Differentiate between autonomic and somatic nervous system
11- Describe the posterior lobe of pituitary gland
11- Define neuron and five the names of different types of neuron with their function
13- Draw neat and labeled diagram of neuron
14- Write a note on thyroid gland
15- Describe peripheral nervous system
16- Why nervous coordination is quick as compared to the chemical coordination?
17- Discuss neurodegenerative disorders

Long Questions

1- Describe the structure and function of different parts of human brain (diagram is not required)

2- Draw a chart to show structure of brain along with its functions
3- Define endocrine glands. Describe pituitary gland as master gland
4- Describe in detail Central nervous system in man (Diagram is not required).
5- Write a note on animal behavior (discus adaptive behavior)

Reproduction

Short Questions:

1- Draw labelled diagrams of different stages of spermatogenesis OR Oogenesis
2- Why is parthenogenesis common in ants?
3- What is genetic monotony? In which type of reproduction is it found?
4- Write a note on spermatogenesis OR oogenesis
5- Write a note on oestrous cycle
6- What is significance of sexual reproduction?
7- Name the various type of Asexual reproduction in animal with the examples 8- Why identical twins are similar but fraternal twins are not.
9- How hermaphroditic condition is advantageous for the parasitic mode of life?

Long Questions

1- Define menstruation. Describe its various phases and the changes take place in each phase with diagrams.
2- Explain the process of Spermatogenesis or Oogenesis. (with diagrams) 3- Draw the diagram of male reproductive system or female reproductive system.
4- Discuss the sexually transmitted disease

Growth and Development

Short Questions

1- How does abnormal development take place in man?
2- Why cleavage in birds called meroblastic and discoidal?
3- Define aging. Give it causes
4- What is abnormal development? Give any three examples
5- Write a note on regeneration
6- Write a note on aging or developmental disorders
7- Discuss the role of cytoplasm or nucleus in development

Long questions

1- Define development. Explain process of gastrulation in a chick up to the formation of three germinal layers. Draw the labelled diagrams.
2- Write a note on embryonic induction

Biotechnology

Short Questions

1- Why DNA fingerprinting is performed?
2- State the significance of genetically engineered bacteria
3- Why plasmid is used in Recombinant DNA technology?
4- Write down the basic steps of Recombinant DNA technology 5- What is tissue culture?
6- Discuss the impact of biotechnology in human life

Long Questions

1- Describe the Recombinant DNA technology. Draw labelled diagrams of every steps
2- Write a note on DNA finger printing
3- Explain the process of tissue culture or cloning

Evolution

Short Questions:

1- State the objections on Lamarck's theory
2- Write any four objections on Darwin's theory of natural selection.
3- Define evolution and theory of special creation
4- Discuss any two evidence for Evolution
5- Discuss weismann theory
6- Define hardy and Weinberg principle

Long Questions

1- Define evolution. Discuss Lamarck's theory and the objections raised against it.
2- Describe the Darwin theory of natural selection and the objections raised against it.

Man and his environment

Short Questions

1- How is ozone layer being depleted?
2- Write a note in acid rain
3- Write a note on eutrophication or algal bloom
4. Name any four viral disease with cause and modes of transmission
5- Define renewable and non-renewable resources and examples

Long Question

1- What is pollution? Describe air pollution
2- Write a note on renewable and nonrenewable sources.